RAILROAD COMMISSION OF TEXAS

Gas Services Division

Market Oversight Section

# February 7, 2011 Natural Gas Trends

Highlights

## AGA: A SMART ENERGY FUTURE

Long-range plan proposed for smart energy infrastructure.

Include natural gas, water, and electricity in advanced metering infrastructure development ....

The American Gas Association recently released a whitepaper titled "Natural Gas in a Smart Energy Future." As noted in the paper, the term 'smart grid' is commonly used to describe an advanced infrastructure for electricity generation.

Rather than focusing solely on electricity, the authors present for

discussion a broad vision of a smart energy infrastructure, a vision that integrates planning for natural gas, water, electricity, and renewables. In the study, a plethora of forward-looking recommendations are compiled for government policymakers, regulators and the natural gas industry to consider. If implemented, the energy market and its customers would be positively impacted, according to the authors.

**Recommendations aimed at policymakers and regulators.** For discussion purposes, the authors divided the natural gas industry into three sectors, including supply, delivery, and end use, as defined in the paper. A few of the overarching policy recommendations are:

- Develop a technology roadmap for natural gas in a smart energy future, including critical input from a broad group of stakeholders and the energy technology research & development community.
- Include natural gas in advanced metering infrastructure development to optimize common infrastructure, interoperability and cross-compensation among all utility infrastructures including electricity and water.
- Expand ongoing Smart Grid standards development efforts to include natural gas.
- Modify market rules to facilitate and create procedures for direct communications between pipeline and electric grid operators to fully optimize the usage of energy.
- Promote real-time communications between the gas and electricity grids.

The whitepaper, which was authored by the Gas Technology Institute and Navigant, is available among other news releases on www.aga.org at:

http://media.godashboard.com/gti/Natural Gas in a Smart Energy Future 01-26-2011.pdf

## **Data**

- March Natural Gas Futures Contract (Feb 4), NYMEX at Henry Hub closed at \$4.310 per million British Thermal Units (MMBtu)
- March Light, Sweet Crude Oil Futures Contract (Feb 4), NYMEX at Cushing closed at \$89.03 per U.S. oil barrel (Bbl.) or approximately \$14.18 per MMBtu

## Last week: Winter storm blasts Texas, U.S.

For the week beginning 1/30/11 and ending 2/5/11, heating degree days were much higher than normal for Texas and the U.S. For the heating season (7/1/10 to 6/30/11), cumulative heating degree days are 1% above normal for Texas and 2% above normal for the U.S.

Source: www.cpc.ncep.noaa.gov

## **HEATING DEGREE DAYS (HDD)**

	Total			
City	HDD for	* Week	Year-to-	<b>4 3/TD</b> 0/
Or Danian	week	HDD	date	* YTD %
Region	ending 2/5/11	+/-from Normal	total HDD	+/- from Normal
	2/3/11	TAOIIIIAI	מעח	Nomiai
Amarillo	317	+ 123	2556	- 9 %
Austin	160	+ 64	1394	+ 17 %
Dallas – FW	230	+ 96	1624	- 3 %
El Paso	241	+ 116	1628	- 11 %
Houston	147	+ 58	1046	- 4 %
San Antonio	155	+ 63	1110	- 3 %
Texas**	186	+ 76	1418	+ 1 %
U.S.**	223	+ 23	2849	+ 2 %

<sup>\*</sup> A minus (-) value is warmer than normal; a plus (+) value is cooler than normal. NOAA uses 65° Fahrenheit as the 'normal' basis from which HDDs are calculated. \*\* State and U.S. degree days are population-weighted by NOAA.

## Last week: U.S. Gas Storage Drops to 2,353 Bcf

For the week ending 1/28/11, U.S. working gas in storage declined from 2,542 to 2,353 Bcf compared to 2,422 Bcf in storage a year ago and compared to an average of 2,348 Bcf in storage during the 5-year period from 2006 to 2010. Working gas in storage in the producing region (which includes Texas) declined from 912 to 856 Bcf.

Source: www.eia.doe.gov

#### U.S. WORKING GAS IN STORAGE

Region	Week ending 1/28/11	Prior Week	One-week Change	Current $\Delta$ from 5-YR Avg (%)
East	1165	1280	- 115	- 8.4 %
West	332	350	- 18	+ 3.8 %
Producing	856	912	- 56	+ 13.2 %
Lower 48 Total	2353	2542	- 189	+ .2 %

Lower 48 states, underground storage, units in billion cubic feet (Bcf)

## Last week: Gas Rig Count down 2 to 911

The **gas** rig count for the U.S. was down 2 last week and up 33 when compared to 12 months ago. The U.S. **total** rig count was up 7 last week and up 404 when compared to 12 months ago.

Source: Baker Hughes

### **BAKER HUGHES ROTARY RIG COUNT**

	As of	+/- Prior	Year	+/-
	2/4/11	Week	Ago	Year Ago
U.S. total	1739	+ 7	1335	+ 404
Gas	911	- 2	878	+ 33
Oil	818	+ 9	445	+ 373
Texas	750	+ 10	541	+ 209
N. Amer.	2365	- 4	1892	+ 473

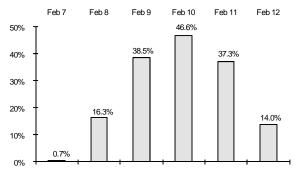
Numbers are excerpted and not meant to be totaled

## This week: U.S. Energy Use Higher Than Norm

U.S. energy use is forecasted to be much higher than normal this week, according to the Dominion Energy Index, as shown below. The index forecasts total U.S. residential energy usage, a component of which is natural gas.

Source: Dominion Energy Index

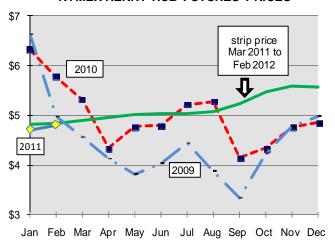
## **U.S. ENERGY USE FORECAST**



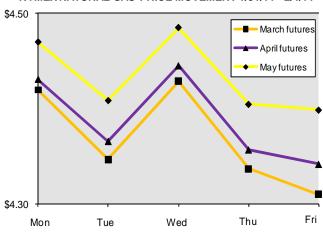
## GAS PRICE SUMMARY AS OF 2/4/11

	This Week	+/- Last Week	+/- Last Year	12-Month Strip Avg.
US March futures				
NYMEX	\$4.310	-\$0.013	-\$0.506	\$4.629

#### NYMEX HENRY HUB FUTURES PRICES



#### NYMEX NATURAL GAS PRICE MOVEMENT 1/31/11 - 2/4/11



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